Improving the Trammel Jig

by Ellis Walentine

One way to make ellipses is to make the traditional "bullshit grinder" jig (pardon my French), where the router is connected to a trammel that is attached to the center of the part being routed. This jig has many limitations, primarily the maximum and minimum size of the oval you can rout.

Fred Matlack and I cooked up an improvement on this principle in American Woodworker issue #31, back in '93 or so. It uses the trammel principle, but it is inverted. Instead of attaching your router to the trammel, you place your workpiece on a platform anchored to an inverted trammel and cantilever your router over it, at any position, to rout your oval.

This arrangement means you can cut ovals from 1/2" x 4 12" to 48" x 96" with the same jig and router setup. If you're interested in making one of those jigs, you'll have to find that issue of AW, because I don't own copyright to the article. If you e-mail me, I'll send you my canned comments about improvements we later found for the design and hardware.

If a simple trammel is all you want, you can buy one outright from Woodhaven (800-344-6657). The Woodhaven jigs are very beautifully engineered with dovetail-grooved phenolic tracks and UHMW trammel blocks, machined to precise tolerances.